The outer interacting winds of Eta Carinae revealed by HST/STIS

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High spatial resolution (0.1") with moderate spectral resolution has been applied to the extended wind structure of Eta Carinae. Doubly-ionized forbidden lines of iron, argon, neon and sulfur, along with [N II] show an extended outer structure associable with the extended wind interaction regions. [Fe II] reveals the structure of the primary wind. We follow the spectro-images of these lines from the 1998.0 through the 2003.5 minima and show changes in structure and velocity as the two massive winds, from a highly eccentric massive binary, interact. The potential is there for mapping density, feeding into 3-D models.